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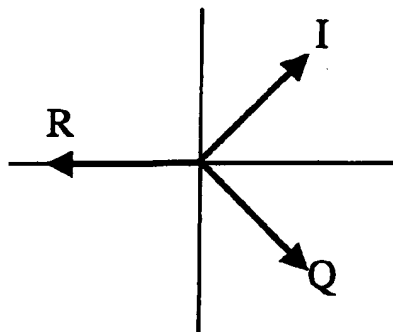
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(54) **Interference suppression in RF signals**

(57) An I/Q direct conversion receiver has an input (5,6) for receiving an RF signal comprising a wanted signal having in-phase and quadrature phase channels modulated onto in-phase and quadrature carrier signals. A signal splitter (7) divides the receiver RF signal into three in-phase signal components. Three substantially identical mixers (8) are provided and receive respective RF signal components for mixing with local oscillator signals. The first mixer (8a) receives the local oscillator signal shifted by 45°, the second mixer (8b) receives the local oscillator signal shifted by -45°, whilst the third mixer (8c) receives the local oscillator signal shifted by 180°. A correction signal is generated by summing at a summing amplifier (11) the first and second baseband signals together with the third baseband signal after appropriate scaling. The in-phase and quadrature phase baseband signals are then corrected by combining these signals at respective comparators (13) with the correction signal.



**Figure 3**

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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 4081

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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H03D H04B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 September 1999	Examiner Peeters, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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